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Cc: Jeanne Briskin; Ramona Trovato; David Jewett; Doug Beak; Randall Ross; Steven Acree; Susan Mravik

Subject: Follow-up to last Friday's meeting in Oklahoma City

 Date:
 03/27/2012 01:37 PM

 Attachments:
 U.S. FOIA Exempt (b) (4)

Hello Stephanie, John and Chris,

Thanks for hosting our meeting last Friday. Although we did not yet reach a resolution on our monitoring network issues, we did have a really positive exchange of information on the technical issues. It was very helpful to have our technical experts present for the discussions, including bringing in the driller and Kent Wilkins from the Oklahoma Water Resources Board. Having Ramona and Jeanne fly in from D.C. also helped us to stay focused and understand how we have to resolve these issues before we go forward.

As of Friday, here is where I think we left off, some of the points we agreed to and action items.

- 1. We confirmed that our QAPP is going to be done in a phased manner, and that while we will give every consideration to Chesapeake's comments, the final judgements on our QAPP must be our decision.
- 2. We agreed that both sides will determine if Chesapeake's desire to perform the initial characterization of the ground water flow characteristics at the proposed site should be pursued. The goal is for Chesapeake to try and accomplish this in approximately three weeks utilizing monitoring wells instead of the GeoProbe installed piezometers EPA had proposed. They would also perform the geophysical logging, possibly even using the USGS. They will allow us to coordinate on the design to ensure the data would be usable for the study's needs to design the monitoring well network, which EPA will still design and construct. This would advance the schedule and the use of wells would likely provide more definitive data.
- 3. Chesapeake will provide EPA written comments on the Technical Memorandum on the potential monitoring well designs, probably as soon as Monday, March 26,2012. (Note: I was out yesterday U.S. FOIA Exempt (b) (6) so I may have missed seeing this, if it has

already been submitted).

4. EPA is providing Chesapeake an addendum to the Technical Memorandum that will describe a compromise approach to installing horizontal monitoring wells which was proposed in today's discussions. This approach will install these wells between the drilling and fracing stages, addressing concerns about uncertainty of location relative to the production well, and potential impacts from cementing of surface casings. The memorandum includes the proposal for Chesapeake to install 3 shallow wells and one deeper well, which would be logged. Here is the memo:



Revised Design Memo.pdf

Note that this memo suggests EPA may contract with USGS to perform the logging, but as I recall, Chesapeake had offered to do the logging along with the installation of these first wells, and may use USGS.

5. Actual monitoring well designs and locations are dependant on information gathered during the site characterization of the ground water

flow.

- 6. Chesapeake will contact the landowner about granting site access for conducting the study ASAP.
- 7. The group will reconvene by teleconference on today at 3:00 pm CDT. Please let me know if I need to revise this, or add items I may have overlooked. Have a good weekend.

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